MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2021/2022

BAC2644 – CORPORATE FINANCE

(All sections/Groups)

28 April 2022

9.00 a.m – 12.00 p.m
(3 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of FOUR (4) pages including the cover page with FOUR (4) questions.

2. Attempt **ALL** questions. The distribution of the marks for each question is given.

3. Please write all your answer in the Answer Booklet.

QUESTION 1

(a) The most recent financial statements for Mandy Company are shown here:

Income Statement		Balance Sheet			
Sales	RM 20,300	**Current assets**	RM 11,980	**Debt**	RM 16,540
Costs	RM 13,900	**Fixed assets**	RM 32,400	**Equity**	RM 27,840
Taxable income	RM 6,400	**Total**	RM 44,380	**Total**	RM 44,380
Taxes (21%)	RM 1,344				
Net income	RM 5,056				

Assets and costs are proportional to sales. Debt and equity are not. The company maintains a constant 45 percent dividend pay-out ratio. What is the sustainable growth rate for this company?

(10 marks)

(b) A project that costs RM21,000 today will generate cash flows of RM7,300 per year for seven years. Calculate the project's payback period?

(5 marks)

(c) Living Colour Company has a project available with the following cash flows:

Year	Cash Flow (RM)
0	-34,910
1	8,000
2	9,610
3	13,630
4	15,650
5	10,400

If the required return for the project is 8 percent, calculate the project's net present value (NPV).

(5 marks)

(d) A project has an initial cost of RM92,200, a life of 7 years, and equal annual cash inflows. The required return is 9 percent. According to the profitability index decision rule, what is the minimum annual cash flow necessary to accept the project?

(5 marks)

(Total: 25 marks)

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QUESTION 2

(a) A project undertaking by BP Sdn. Bhd. has base-case earnings before interest and taxes of RM29,500, fixed costs of RM35,600, a selling price of RM26 a unit, and a sales quantity of 19,500 units. All estimates are accurate within ±4 percent. The depreciation of this project is RM17,600. As an initial screening, the company estimates accounting break-even of this project. The accounting break-even production quantity for this project is 17,500 units. The fixed costs are RM35,600 and the contribution margin per unit is RM14. The fixed assets required for the project will be depreciated on straight-line basis to zero over the project's 4-year life.

(i) What is the base-case variable cost per unit?

(7 Marks)

(ii) What is the amount of fixed assets required for this project?

(6 Marks)

(b) A portfolio consists of 40 percent investment each in stock A and B, and the balance 20 percent is invested in Stock C. The information of these three stocks is given as below:

State of Economy	Probability of State of Economy	Rate of Returns if States Occur		
		Stock A	Stock B	Stock C
Boom	0.35	0.25	0.19	0.09
Normal	0.4	0.17	0.17	0.07
Bust	0.25	-0.14	-0.09	0.11

(i) Compute the expected risk premium on the portfolio if the expected T-bill rate is 3.5 percent.

(6 Marks)

(ii) Calculate the differences in the expected returns between Stock A and Stock C, and between Stock B and Stock C.

(6 marks)
(Total: 25 marks)

QUESTION 3

(a)Wholesale Supply has earnings before interest and taxes of RM148,600. Both the book and the market value of debt is RM220,000. The unlevered cost of equity is 13.6 percent while the pretax cost of debt is 7.4 percent. The tax rate is 21 percent. What is the weighted average cost of capital?

(15 marks)

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(b) Hasten Mills has beginning inventory of RM11,062, accounts payable of RM8,010, and accounts receivable of RM7,844. The end-of-year values are RM11,362 for inventory, RM7,898 for accounts payable, and RM8,029 for accounts receivable. Net sales are RM109,100 and costs of goods sold are RM56,220. How many days are in the cash cycle?

(10 marks)

(Total: 25 marks)

QUESTION 4

a) As a finance manager of Nina Corporation, you are analyzing a project Alpha with an initial cost of RM145,000. The project is expected to return RM18,000 the first year, RM48,000 the second year, and RM87,000 the third year. There is no salvage value. You intend to venture this project in the U.S. and hence you are concerned about the foreign exchange rates and interest rate parity. The current spot rate against US$ is RM5.201. The nominal risk-free return is 4 percent in Malaysia and 2.5 percent in the U.S. The return relevant to the project is 12 percent in the U.S. Assume that uncovered interest rate parity exists. In another project, project Delta, you plan to involve in hedging activities to minimize risk. In future contracts, you sold three March cocoa future contracts at a price quote of 950. Cocoa futures contracts are based on 8 metric tons and priced in Ringgit Malaysia (RM) per ton.

(i) What is the net present value of project Alpha in U.S. dollars?

(10 Marks)

(ii) What will be your profit or loss of project Delta's contract if the price turns out to be RM1000 per metric ton at expiration?

(5 Marks)

(b) Prior to the merger, Firm Dune has RM1,140 in total earnings with 760 shares outstanding at a market price per share of RM40. Firm Matrix has RM680 in total earnings with 175 shares outstanding at RM19 per share. Assume Firm Dune acquires Firm Matrix via an exchange of stock at a price of RM20 for each share of Matrix's stock. Both Dune and Matrix have no debt outstanding.

(i) What will the earnings per share of Firm Dune be after the merger?

(6 Marks)

(ii) Provide FOUR examples of cost reductions that can result from an acquisition.

(4 Marks)

(Total: 25 Marks)

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